

Chemistry: WebElements Periodic Table: Professional Edition: Titanium: thermal properties and temperatures

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WebElements' printable table

Titaan

titane

Titan

titanio

Titânio

titanio

Titan



Online discussions

index

Index for titanium

background

Key data; description
History

titanium around us

Uses
Geology
Biology

titanium compounds

Reactions of titanium
Compounds
Bond enthalpies
Radii in compounds
Lattice energies
Reduction potentials

electronic properties

Electronic configuration
Ionization energies
Electron affinities
Electronegativities
Effective nuclear charges
Electron binding energies
Atom radii
Valence shell radii

physical properties

Bulk properties
(density, resistivity, etc.)
Thermal properties

Titanium

22

Ti

47.867(1)

Thermal Properties and temperatures

Temperatures

View...

Go!

Melting point [/K]: 1941 [or 1668 °C (3034 °F)]

View...

Go!

Boiling point [/K]: 3560 [or 3287 °C (5949 °F)] (liquid range: 1619 K)

View...

Go!

Critical temperature [/K]: no data

View...

Go!

Superconduction temperature [/K]: 0.40 [or -272.7 °C (-458.9 °F)]

Show elements whose melting point is

K

sorted by

Show...

Show elements whose boiling point is

K

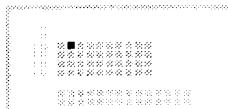
sorted by

Show...

Switch



printed-friendly



Pick element...

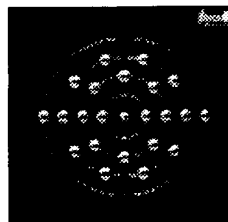
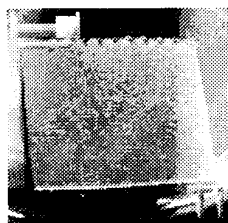


Switch to...

Go!

Go adjacent...

Sc	Ti	V
Y	Zr	Nb



(melting point, etc.)

Thermodynamic
properties**crystallography**

Crystal structure

[view VR world]

[view pdb image]

nuclear properties

NMR

Naturally occurring
isotopes

Radioisotopes

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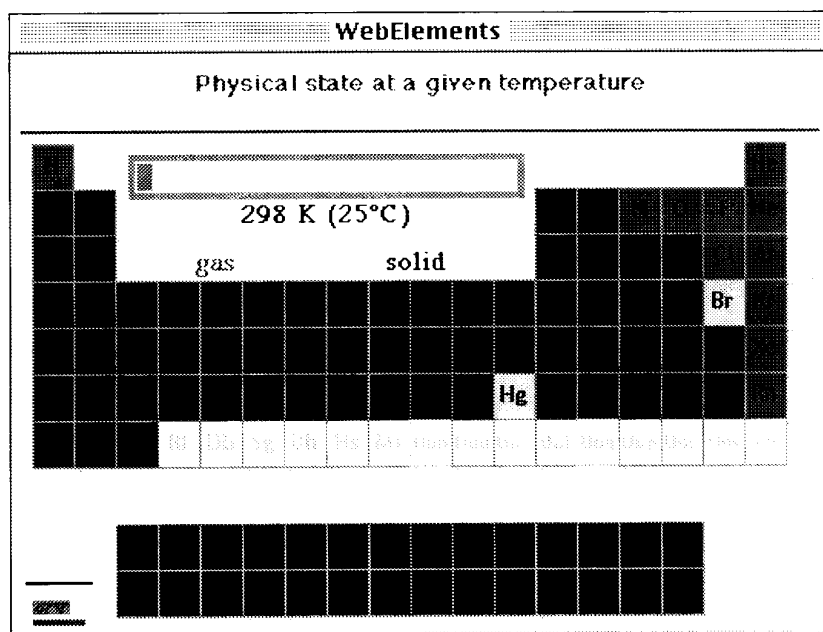
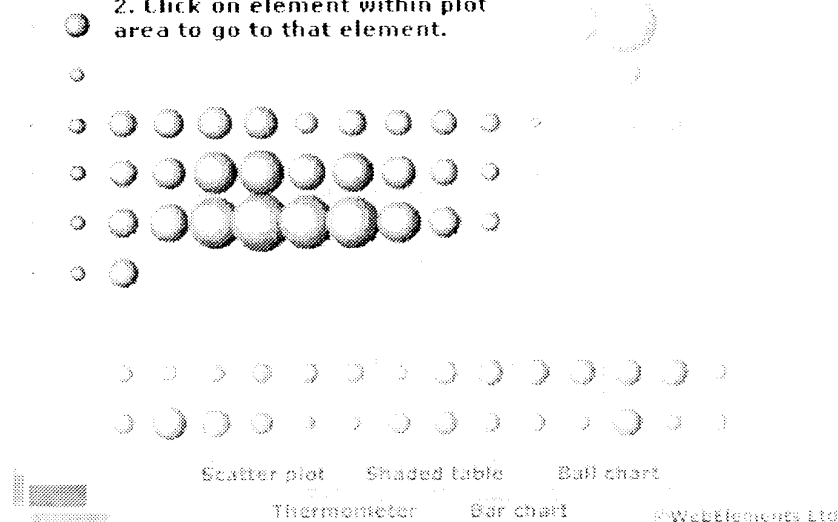
Sign the guest book

FlashElements

Search by keywords:

titanium

amazon.com

Melting point1. Drag cursor around plot area
to show information.2. Click on element within plot
area to go to that element.

- Animate the above image by quicktime movie (large file: 275 k, QuickTime player required.)
- Animate the above image by animated gif (large file: 270 k)

Expansion and conduction properties

View...

Thermal conductivity [$\text{W m}^{-1} \text{K}^{-1}$]:**compounds**Select formula
from below:**Fluorides** TiF_2 TiF_3 TiF_4 **Chlorides** TiCl_2 TiCl_3 TiCl_4 **Bromides** TiBr_2 TiBr_3 TiBr_4 **Iodides** TiI_2 TiI_3 TiI_4 **Hydrides** TiH_2 **Oxides** TiO TiO_2 Ti_2O_3 Ti_3O_5 **Sulfides** TiS TiS_2 Ti_2S_3 **Selenides**

none listed

Tellurides

none listed

Nitrides TiN

<input type="button" value="Go!"/>	22
<input type="button" value="View..."/>	Coefficient of linear thermal
<input type="button" value="Go!"/>	expansion [K^{-1} multiplied by 10^6]:
	8.6

Enthalpies

<input type="button" value="View..."/>	Enthalpy of fusion [kJ mol^{-1}]: 18.7
<input type="button" value="Go!"/>	
<input type="button" value="View..."/>	Enthalpy of vaporization [kJ mol^{-1}]: 425
<input type="button" value="Go!"/>	
<input type="button" value="View..."/>	Enthalpy of atomization [kJ mol^{-1}]: 471
<input type="button" value="Go!"/>	

Show elements whose enthalpy of fusion is

kJ mol^{-1}
sorted by

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WebElements printable table



Online discussions

Tungsten

74

W

183.84(1)

switch



photo-friendly

index[Index for tungsten](#)**background**[Key data; description](#)[History](#)**tungsten around us**[Uses](#)[Geology](#)[Biology](#)**tungsten compounds**[Reactions of tungsten](#)[Compounds](#)[Bond enthalpies](#)[Radii in compounds](#)[Lattice energies](#)[Reduction potentials](#)**electronic properties**[Electronic configuration](#)[Ionization energies](#)[Electron affinities](#)[Electronegativities](#)[Effective nuclear charges](#)[Electron binding energies](#)[Atom radii](#)[Valence shell radii](#)**physical properties**[Bulk properties \(density, resistivity,](#)**Thermal Properties and temperatures****Temperatures**

View...

Go!

Melting point [/K]: 3695 [or 3422 °C (6192 °F)]

View...

Go!

Boiling point [/K]: 5828 [or 5555 °C (10031 °F)] (liquid range: 2133 K)

View...

Go!

Critical temperature [/K]: no data

View...

Go!

Superconduction temperature [/K]: 0.015 [or -273.135 °C (-459.64 °F)]

Show elements whose melting point is Ksorted by [Show...](#)Show elements whose boiling point is Ksorted by [Show...](#)

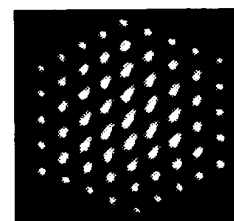
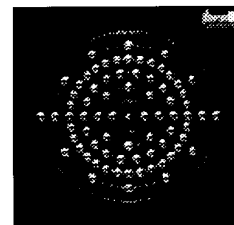
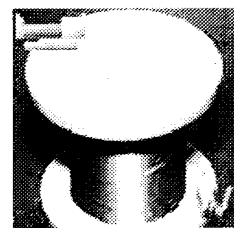
Pick element...

Switch to...

Go!

Go adjacent...

Nb	Mo	Tc
Ta	W	Re
Db	Sg	Bh



etc.)

Thermal properties
(melting point, etc.)
Thermodynamic
properties

crystallography


Crystal structure
[view VR world]
[view pdb image]


nuclear properties

NMR
Naturally occurring
isotopes
Radioisotopes

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Search by keywords:

tungsten



Melting point

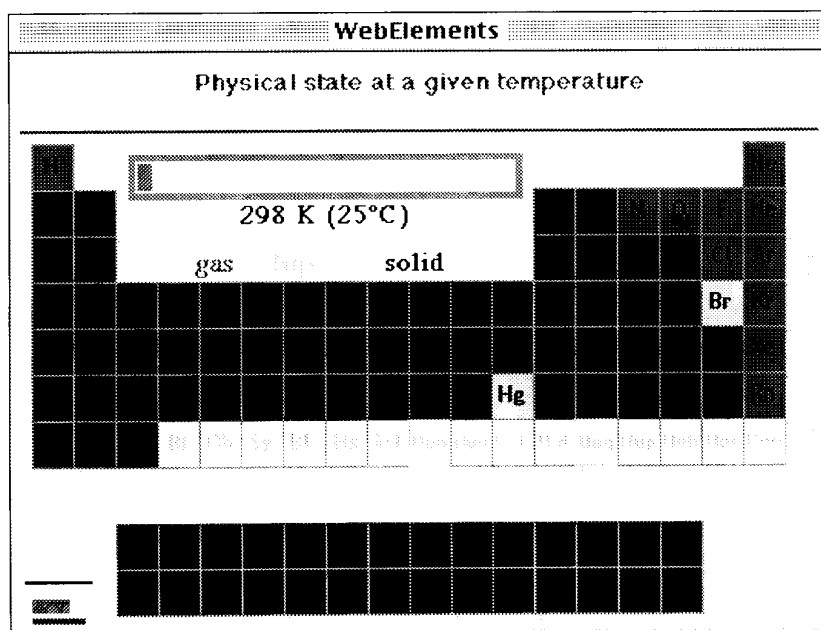
1. Drag cursor around plot area to show information.
2. Click on element within plot area to go to that element.

H	1. Drag cursor around plot area to show information.																He						
Li	Be	2. Click on element within plot area to go to that element.																B	C	N	O	F	Ne
Na	Mg																	Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr						
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe						
Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn						
Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Uun	Uuu	Uub	Uut	Uuq	Uup	Uuh	Uus	Uuo						
La Ce Pr Nd Pm Sm Eu Gd Tb Dy Ho Er Tm Yb																							
Ac Th Pa U Np Pu Am Cm Bk Cf Es Fm Md No																							

Scatter plot Shaded table Ball chart

Thermometer Bar chart

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- Animate the above image by animated gif (large file: 270 k)

Expansion and conduction properties

View...

Thermal conductivity [$\text{W m}^{-1} \text{K}^{-1}$]:

WebElements

compounds

Select formula
from below:

Fluorides

WF_4
 WF_6
 $[\text{WF}_5]_4$

Chlorides

WCl_2
 WCl_4
 WCl_6
 $[\text{WCl}_5]_2$
 $[\text{W}_6\text{Cl}_{12}]\text{Cl}_6$

Bromides

WBr_2
 WBr_3
 WBr_4
 WBr_5
 WBr_6

Iodides

WI_2
 WI_3
 WI_4

Hydrides

none listed

Oxides

WO_2
 WO_3

Sulfides

WS_2

Selenides

WSe_2

Tellurides

WTe_2

Nitrides

none listed

Go! 170
View...
Go! Coefficient of linear thermal expansion [$/K^{-1}$ multiplied by 10^6]: 4.5

Enthalpies

View... Enthalpy of fusion [$/kJ\ mol^{-1}$]: 35
Go!

View... Enthalpy of vaporization [$/kJ\ mol^{-1}$]: 800
Go!

View... Enthalpy of atomization [$/kJ\ mol^{-1}$]: 860
Go!

Show elements whose enthalpy of fusion is

> or = 0 $kJ\ mol^{-1}$
sorted ascending by enthalpy of fusion Show...

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